Substitute Specification Version

## SENSOR AND ASSEMBLY FOR HYDROMETRIC MEASUREMENTS

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Field Of The Invention

An aspect of the invention described herein is a lectronic means capable of generating a ultra-high frequency excitation signal, with a transmission line, with measuring cells connectible in series on this transmission line, and with electronic means for processing the reflected signals. Another aspect is the processing of hydrometric measurements from the previous transducers.

Another aspect of the invention described herein is the separation between the active electronic components generating the excitation signal and processing the reflected signals on the one hand, and the passive components such as the transmission line and the measuring cells which may be placed under hostile notably temperature or radiation conditions.

Background Of The Invention

The term "ultra-high frequency cable" is herein defined as a cable for which the dimensions of the conductors and the dimensions and characteristics of the dielectric between these conductors are adequate so that this cable has a characteristic impedance of constant value in a wide frequency range extending from a few MHz to several GHz. Its structure may be coaxial, shielded bifilar or unshielded bifilar. Such a cable is used for producing the transmission line of the measuring device according to the present invention.